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OK SHOOT NORMAN K

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S E C R E T

BEACON PROJECT SUMMARY TO DATE

1. PRELIMINARY MEASUREMENTS INDICATE THAT DURING SQUEGGING, THE RF SIGNAL CAN BE RECEIVED OVER THE FREQUENCY RANGE OF 235 TO 255 MC THIS FACT COMES AS A SURPRISE - A88888 THESE ARE STILL SOME QUESTIONS CONCERNING THE METHODS OF MEASUREMENT - INVESTIGATION ON THIS POINT IS NOT COMPLETE. 2. A TENTATIVE MODIFICATION FOR CW OPERATION HAS BEEN MADE WITH B PLUS VOLTAGE SUPPLIED BU888B.Y AN EXTERNAL REGULATED POWER SUPPLY. 3. AN EXTERNAL POWER SUPPLY IS USED AT THIS POINT BECAUSE : (- 8888 (A) THE SR SARAH VIBRATOR SUPPLY IS DESIGNED FOR HG8888 HIGH VOLTAGE LOW CURRENT PULSED OPERATION AND DOES NOT APPEAR CAPABLE OFSUPPLYING THE MUCH HIGHER CURRENT, (AT A LOWER VOLTAGE), REQUIRED BY OUR MODIFICATION AT ITS PRESENT PHASE. THE LOWEST DRAIN OBTAINED THUS FAR, FOR CW OPERATION EMPLOYING THE BASIC CNF8888 CONFIGURATION OF THE ORIGINAL OSCILLATOR, HAS BEEN 8 MA.

(B) WE HAVE VERY LIMITED INFORMATION ON THE SARAH POWER SUPPLY; HOWEVER, AN AREA-TO-AREA COMPARISON OF THE RECTIFIERS WITH THOSE FAMILIAR TO US INDICATE A CAPA

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CAPACITY OF APPROX [redacted]MA (THIS COMPARISON MAY N[redacted]BE VALIE8888 VALID IN TERMS OF FOREIGN COMPONENTS

)

4. DRIFT MEASUREMENTS TO DATE: (A) DRIFT FROM A COLD START-MAXIMUM RANGE: 40 KCS (MAX. RANGE OBTAINED DURING FIRST 5 MIN.) (B) SHIFT IN/OUT OF CASE: 285 KCSAM (C) DRASTIC FREQUENCY SHIFTS NOTED WHEN THE POSITION OF OBJECTS IN PROXIMITY OF ANTENNA IS CHANGED WHILE OPERATING CW. (THESE MEASUREMENTS ARE STILL ROUGH AND WERE MADE USING AN EXTERNAL POWER SUPPLY) KKK88888888((ALL MEASUREMENTS MADE AT AMBIENT TEMPERATURE).

5. DIRECTION OF STUDY AS OF NOW: (A) TO DETERMINE EXTENT OF OSCILLATOR MODIFICATION REQUIRED TO USE THE PRESENT POWER SUPPLYM

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THE PRESENT POWER SUPPLY AS IS . (B) EXAMINE THE POSSIBILITY OF MODIFYING THE POWER SUPPLY TO MEET REQUIREMENTS INDICATED BY PRESENT OSCILLATOR

6STEPSTTOEBESACCOMBLTHERD IN ORDER LISTED).

(STEPS TO BE ACCOMPLISHED IN ORDER LISTED).

6. IT SEEMS TO US THR8888 THERE IS A REMOTE POSSIBILITY THAT THE SARAH BEACON IS COMPATIBLE WT888

WITH THE ARC-27/ARA-22 SYSTEM IN ITS PRESENT FORM

WOULD LIKE TO RECEIVE YOUR COMMENTS ON THIS POSSIBILITY

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7. CAN THE ARC27 BE MANUALLY TUNED?

8. WHAT IS THE POSSIBILITY OF OBTAINING MORE DETAILED INFO ON SARAH POWER SUPPLY? OR OF OBTAINING REPLACEMENT COMPONENTS FOR THE POWER SUPPLY IN ORDER TO PRMIT OUR DETERMINATION OF OPERATING MAXIMA WITHOUT THE POSSIBILITY OF JEOPARDIZING PRESENT SCHEDULES? K

SS ANSWER TO MR HAAS FOLLOWS

DONT BELIEVE UPSWING SHOULD APPEAR IN THE REPORT AT ALL OTHERWISE YOU WILL HAVE TO CLASSIFY THE WHOLE REPORT. DOES THE UNIT HAVE A TYPE NUMBER THAT YOU CAN USE IN THE REPORT ? K

I DON'T BELIEVE IT DOES, BUT WILL CHECK. THANK YOU. K

THIS IS HART AGAIN

1. FANTASTIC!!!

2. WILL ATTEMPT TO OBTAIN MORE INFO ON POWER SUPPLY

3. IF YOU WILL LIST ADDNL PARTS REQUIRED FOR BACK UP FOR ADDNL TESTING WILL GET A READING ON AVAILABILITY AND TIME REQUIRED FOR DELIVERY.

4. THE AIR FORCE AND NAVY HAVE TESTED THE SARAH VS THE ARA/25 HOMING GROUP AND ADVISE THEY ARE NOT COMPATABLEMII888 THIS IS OF COURSE NOT THE LAST WORD. I THINK THE BANDWIDTH OF THE ARC/27 IS IN THE ORDER OF 1ØØKC. IF THIS IS THE CAS E WHAT PERCENTAGE OF POWER WOULD YOU EXPECT TO GET WIY888 WITH A U MICSEC 888 WITH A 7 MIC SEC PULSE OF THE SARAH TYPE?? WOULDN'T THIS CUT THE RANGE RATHER DT88 DRASTICALLY??

5. I DO NOT BELIEVE THE ARC/27 CAN BE MANUALLY TUNED.

6. THE BASIC PROBLEM IS TO TRY TO MODIFY THE SARAH BEACON SO THAT THE FULL AVERAGE POWER OF APPROX 6Ø MW MAY BE RECEIVED BY THE ARC/27 FOR OPERATION OF THE ARA/25 IT WOULD APPEAR THAT IF THE SARAH POWER SUPPLY CAN BE MODIFIED IT WOULD NOT DRIFT TOO FAR TO OPERATE INTO THE ARC/27 AFTER WARM UP. DO YOU Z88 -&43 AGREE??K

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